**Methods**

*Data compilation:* All zircon analyses Plotted in Figure 4 have been compiled from published literature sources cited in our zircon database Electronic Supplement Table S2. All analyses are of zircons extracted directly from igneous rock samples (no detritals) considered by the literature source to have been generated in a supra-subduction zone, convergent plate margin tectonic setting of Phanerozoic age. All zircons have individual U-Pb age determinations or come from a dated zircon population regarded by the literature source to be cognate to the igneous suite. All zircons have microbeam (SIMS or LA-ICPMS) analyses of Ti, U, Th, Y, and REEs including at least Ce, Nd, Sm, Eu, Gd, and Yb.

*Data filtering:* Xenocrysts and altered zircons identified by U-Pb ages that are conspicuously discordant (≥2) with other zircons in the same rock sample are excluded. Microbeam analyses contaminated by other phases, most commonly apatite micro-inclusions, are excluded. Analyses having >1 ppm La and or >30 ppm Ca or >600 ppm P are regarded as probably contaminated by phosphate mineral inclusions and are excluded. Samples having reported ppm Ti deviating by more than 2 from the mean of Ti values in the same sample are excluded as erratics. Rare analyses having thousands of ppm Th and U are apparently contaminated by nano-inclusions of thorite or coffinite, (Th,U)SiO4, and are excluded from consideration. All excluded analyses are listed in the database, but values of (Eu/Eu\*)/YbN and Ce/√(Ui×Ti) are not listed and the analyses are not plotted. The reason for exclusion from data plots is listed in column BF of the Excel database, Electronic Supplement Table S2.